

Nurse Family Partnership for low-income families

Benefit-cost estimates updated December 2014. Literature review updated April 2012.

Current estimates replace old estimates. Numbers will change over time as a result of model inputs and monetization methods.

The WSIPP benefit-cost analysis examines, on an apples-to-apples basis, the monetary value of programs or policies to determine whether the benefits from the program exceed its costs. WSIPP's research approach to identifying evidence-based programs and policies has three main steps. First, we determine "what works" (and what does not work) to improve outcomes using a statistical technique called meta-analysis. Second, we calculate whether the benefits of a program exceed its costs. Third, we estimate the risk of investing in a program by testing the sensitivity of our results. For more detail on our methods, see our [technical documentation](#).

Program Description: The Nurse Family Partnership program provides intensive visitation by nurses during a woman's pregnancy and the first two years after birth; the program was developed by Dr. David Olds. The goal is to promote the child's development and provide support and instructive parenting skills to the parents. The program is designed to serve low-income, at-risk pregnant women bearing their first child.

Benefit-Cost Summary

Program benefits		Summary statistics	
Participants	\$11,607	Benefit to cost ratio	\$2.77
Taxpayers	\$9,955	Benefits minus costs	\$17,332
Other (1)	\$9,540	Probability of a positive net present value	71 %
Other (2)	(\$3,928)		
Total	\$27,174		
Costs	(\$9,842)		
Benefits minus cost	\$17,332		

The estimates shown are present value, life cycle benefits and costs. All dollars are expressed in the base year chosen for this analysis (2013). The economic discount rates and other relevant parameters are described in our [technical documentation](#).

Detailed Monetary Benefit Estimates

Source of benefits	Benefits to				Total benefits
	Participants	Taxpayers	Other (1)	Other (2)	
From primary participant					
Crime	\$0	\$1,323	\$3,932	\$659	\$5,914
Labor market earnings (test scores)	\$1,971	\$841	\$979	\$0	\$3,791
Child abuse and neglect	\$1,130	\$355	\$0	\$178	\$1,663
K-12 grade repetition	\$0	(\$94)	\$0	(\$47)	(\$141)
K-12 special education	\$0	(\$1,007)	\$0	(\$506)	(\$1,513)
Property loss (alcohol abuse/dependence)	\$0	\$0	\$0	\$0	\$1
Health care (disruptive behavior disorder)	\$12	\$38	\$47	\$19	\$116
Subtotals	\$3,114	\$1,456	\$4,959	\$302	\$9,831
From secondary participant					
Crime	\$0	\$201	\$729	\$97	\$1,027
Labor market earnings (hs grad)	\$9,593	\$4,092	\$4,750	\$0	\$18,436
Public assistance	(\$945)	\$2,996	\$0	\$0	\$2,051
Health care (educational attainment)	(\$155)	\$1,211	(\$898)	\$606	\$764
Subtotals	\$8,493	\$8,499	\$4,581	\$703	\$22,277
Adjustment for deadweight cost of program	\$0	\$0	\$0	(\$4,934)	(\$4,934)
Totals	\$11,607	\$9,955	\$9,540	(\$3,928)	\$27,174

We created the two “other” categories to report results that do not fit neatly in the “participant” or “taxpayer” perspectives. In the “Other (1)” category we include the benefits of reductions in crime victimization and the economic spillover benefits of improvement in human capital outcomes. In the “Other (2)” category we include estimates of the net changes in the value of a statistical life and net changes in the deadweight costs of taxation.

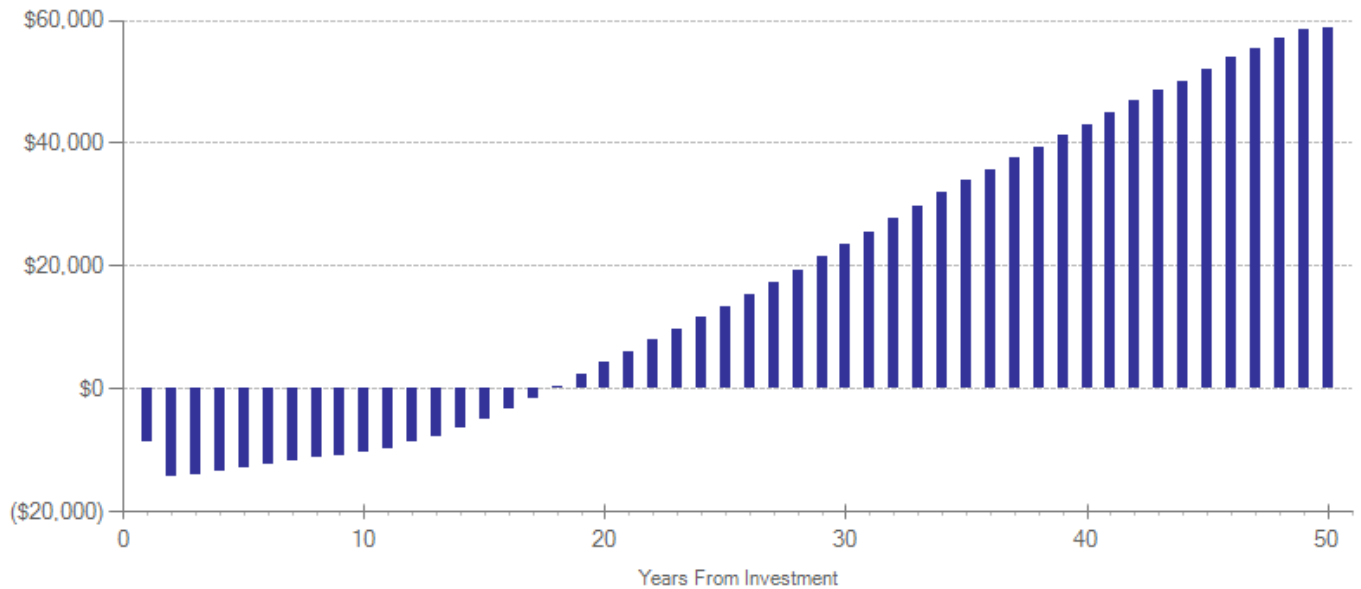
Detailed Cost Estimates

	Annual cost	Program duration	Year dollars	Summary statistics	
Program costs	\$5,383	1.68	2007	Present value of net program costs (in 2013 dollars)	(\$9,842)
Comparison costs	\$0	1	2007	Uncertainty (+ or - %)	10 %

Average annual expenditures per family and average length of service provided by Kristen Rogers at Nurse Family Partnership, Northwest Regional Office July, 08.

The figures shown are estimates of the costs to implement programs in Washington. The comparison group costs reflect either no treatment or treatment as usual, depending on how effect sizes were calculated in the meta analysis. The uncertainty range is used in Monte Carlo risk analysis, described in our [technical documentation](#).

Cumulative Net Cash Flows Over Time (Non-Discounted Dollars)



Meta-Analysis of Program Effects

Outcomes measured	Primary or secondary participant	No. of effect sizes	Treatment N	Unadjusted effect size (random effects model)		Adjusted effect sizes and standard errors used in the benefit-cost analysis					
				ES	p-value	First time ES is estimated			Second time ES is estimated		
						ES	SE	Age	ES	SE	Age
Crime	Secondary	2	266	-0.265	0.472	-0.027	0.151	31	-0.027	0.151	41
Crime	Primary	1	37	-0.700	0.001	-0.252	0.214	15	-0.252	0.214	25
Disruptive behavior disorder symptoms	Primary	1	191	-0.218	0.013	-0.218	0.087	12	-0.104	0.063	15
Child abuse and neglect	Primary	1	38	-0.883	0.001	-0.318	0.140	15	-0.318	0.140	17
Test scores	Primary	2	394	0.132	0.043	0.132	0.065	5	0.041	0.072	17
High school graduation	Secondary	2	401	0.096	0.271	0.096	0.088	23	0.096	0.088	23
K-12 grade repetition	Primary	1	191	0.140	0.262	0.140	0.125	12	0.140	0.125	17
K-12 special education	Primary	1	191	0.288	0.068	0.288	0.158	12	0.288	0.158	17
Substance abuse	Secondary	3	470	-0.274	0.377	-0.088	0.228	28	-0.088	0.228	38
Employment	Secondary	3	423	0.120	0.176	0.086	0.070	26	0.086	0.070	36
Public assistance	Secondary	3	470	-0.165	0.109	-0.095	0.059	28	-0.095	0.059	38
Internalizing symptoms	Primary	1	191	-0.280	0.024	-0.280	0.124	12	-0.204	0.125	14

Citations Used in the Meta-Analysis

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